BIODEGRADASI KOMPONEN SERAT JERAMI JAGUNG OLEH *Trichoderma sp.* YANG DIBERI RAC SEBAGAI PAKAN TERNAK RUMINANSIA

(Biodegradation Fiber Component Corn Stover Inoculated by *Trichoderma sp.* and RAC as Ruminant Feed)

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ABSTRAK

Penelitian ini terdiri dari dua tahap, penelitian tahap pertama bertujuan untuk mengetahui nilai nutrisi jerami jagung yang diinokulasi fungi *Trichoderma sp.* dan RAC. Rancangan percobaan yang digunakan adalah rancangan acak lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. P1: Jerami jagung + 5% *Trichoderma sp.* + 1% RAC ; P2: Jerami jagung + 5% *Trichoderma sp.* + 2% RAC ; P3: Jerami jagung + 5% *Trichoderma sp.* + 3% RAC ; P4: Jerami jagung + 5% *Trichoderma sp.* + 4% RAC ; P5: Jerami jagung + 5% *Trichoderma sp.* + 5% RAC. Sidik ragam menunjukkan bahwa jerami jagung yang diinokulasi fungi *Trichoderma sp.* dan RAC berpengaruh nyata ($P<0.05$) terhadap NDF, ADF dan tidak berpengaruh nyata ($P>0.05$) terhadap kandungan protein kasar. Pemberian RAC 3% pada jerami jagung yang diinokulasi fungi *Trichoderma sp.* dapat menurunkan NDF, ADF dan ada kecenderungan meningkatkan kandungan protein kasar. Penelitian tahap kedua merupakan uji biologis dari hasil penelitian tahap pertama pada ternak kambing. Penelitian menggunakan 12 ekor ternak kambing Peranakan Etawah yang berumur satu tahun. Rancangan percobaan yang digunakan adalah rancangan acak kelompok (RAK) dengan 3 perlakuan dan 4 ulangan. Perlakuan A : 80% jerami jagung olahan + 20% daun gamal + konsentrat 0.5 % bobot badan, perlakuan B : 80% jerami jagung olahan + 20% daun gamal + konsentrat 1% bobot badan, perlakuan C : 80% jerami jagung olahan + 20% daun gamal + konsentrat 1.5% bobot badan. Sidik ragam menunjukkan bahwa level pemberian konsentrat tidak berpengaruh nyata ($P>0.05$) terhadap konsumsi bahan kering.

Kata Kunci : Jerami jagung, nilai nutrisi, RAC, *Trichoderma sp.* kambing

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ABSTRACT

This study consisted of two phases, the first phase of the study aims to determine the nutritive value of corn stover inoculated by the fungi *Trichoderma sp.* and RAC. The experimental design used a completely randomized design (CRD) with 5 treatments and 3 replications. P1: Corn stover + 5% *Trichoderma sp*. + 1% RAC; P2: Corn stover + 5% *Trichoderma sp.* + 2% RAC ; P3: Corn stover + 5% *Trichoderma sp*. + 3% RAC ; P4 : Corn stover + 5% *Trichoderma sp*. + 4% RAC; P5: Corn stover + 5% *Trichoderma sp.* + 5% RAC. Analysis of variance showed that corn stover inoculated by fungi *Trichoderma sp*. significantly effect (P< 0.05) on NDF and ADF, no significanly (P> 0.05) to the crude protein content. It was concluded that the of RAC 3% in corn stover inoculated by fungi *Trichoderma sp*. could lower NDF, ADF and there is a tendency to increase the crude protein content. The second phase was a biological test of the results of the first phase of research on goats. Research used 12 head of Peranakan Etawah goats a year old. The experimental design used a randomized complete block design (RBD) with 3 treatments and 4 replications. Treatment A: 80% of processed corn stover + 20% Gliricidia leaves + Concentrate 0.5% of body weight, Treatment B : 80% of processed corn stover + 20% Gliricidia leaves + Concentrate 1.0 % of body weight, Treatment C: 80% of processed corn stover + 20% Gliricidia leaves +1.5% of body weight. Analysis of variance showed that the level of concentrate not significantly effect (P> 0.05) on dry matter intake.

Keywords: Corn stover, nutritive value, RAC, *Trichoderma sp.* goat